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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/813,348      | 03/21/2001  | Yoshihito Asao       | Q63175              | 3466             |

7590 05/14/2002

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
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EXAMINER

GONZALEZ, JULIO C

ART UNIT PAPER NUMBER

2834

DATE MAILED: 05/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/813,348

Applicant(s)

ASAO ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 04 March 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 3/4/02 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of having the rotational detector been connected to the control unit 9. Moreover, the rotational detector has not been assigned a numeral reference in the specifications or in the proposed drawings.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 6 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, the field current is controlled base on the temperature of the coil and in claim 6, the field current is controlled base on the temperature of the current.

Which device is been controlled? Is the field current the same current that goes

through the coil? How is the field current control by its temperature? Is the temperature of the field current the same temperature that goes through the coil? In claim 10, how is the gradient temperature related to the suppressing of the temperature rise of the alternator? How such suppression of temperature creates a negative gradient? What specifically is meant by "negative"?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyuki in view of Glennon.

Kaneyuki discloses a power supply system for a vehicle having an alternator 1 with armature winding 2, field coil 3, a load 11, a battery 10, a voltage control means 8 and a control means 20 and a step-down DC/DC converter 14 (see figure 1), which output the voltage to a battery (column 2, lines 30-38).

However, Kaneyuki does not disclose the use of step-up DC/DC converter.

On the other hand, Glennon discloses for the purpose of improving the reliability of prime movers that it is well known in the art of prime movers to step up the voltage of a battery using a step-up DC/DC converter and apply the voltage to the field coils (column 1, lines 25-29 & figures 1, 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a power supply system as disclosed by Kaneyuki and to use a step-up DC/DC converter for the purpose of improving the reliability of prime movers as disclosed by Glennon.

✓ 5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyuki and Glennon as applied to claim 1 above, and further in view of Taniguchi et al (Patent No. 5,719,484).

The combined prime mover discloses all of the elements above. However, the combined invention fails to disclose a specific power factor.

On the other hand, Taniguchi et al discloses for the purpose of creating sufficient power when the load increases and increase the magnetic flux in the armature winding that the voltage factor can be of 1.2 to 2.0 (see claim 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the above combined prime mover and to use a specific voltage factor for the purpose of creating sufficient power when the load increases and increase the magnetic flux in the armature winding as disclosed by Taniguchi.

6. Claims 4-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyuki and Glennon as applied to claims 1 and 8 above, and further in view of Taniguchi et al (Patent No. 5,726,559).

The combined prime mover discloses all of the elements above. However, the combined invention fails to disclose sensing the temperature of the coil for controlling the power supply system.

On the other hand, Taniguchi et al discloses for the purpose of restraining increase in rotor temperature, means for reducing the temperature of the winding thus controlling the current based on the rotational speed detected (column 1, lines 48-53 & lines 58-62). Also, Taniguchi discloses using a rotational detector (see claim 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the above combined prime mover and to use a rotational detector for the purpose of restraining increase in rotor temperature as disclosed by Taniguchi et al.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the control unit detecting an on/off state of a switch for supplying power to a load, the output voltage of the alternator been switched to a low charging voltage, a regulator operating a voltage controller for controlling the field current ) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action.

In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371.



Application/Control Number: 09/813,348  
Art Unit: 2834

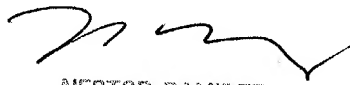
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The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

May 9, 2002

  
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